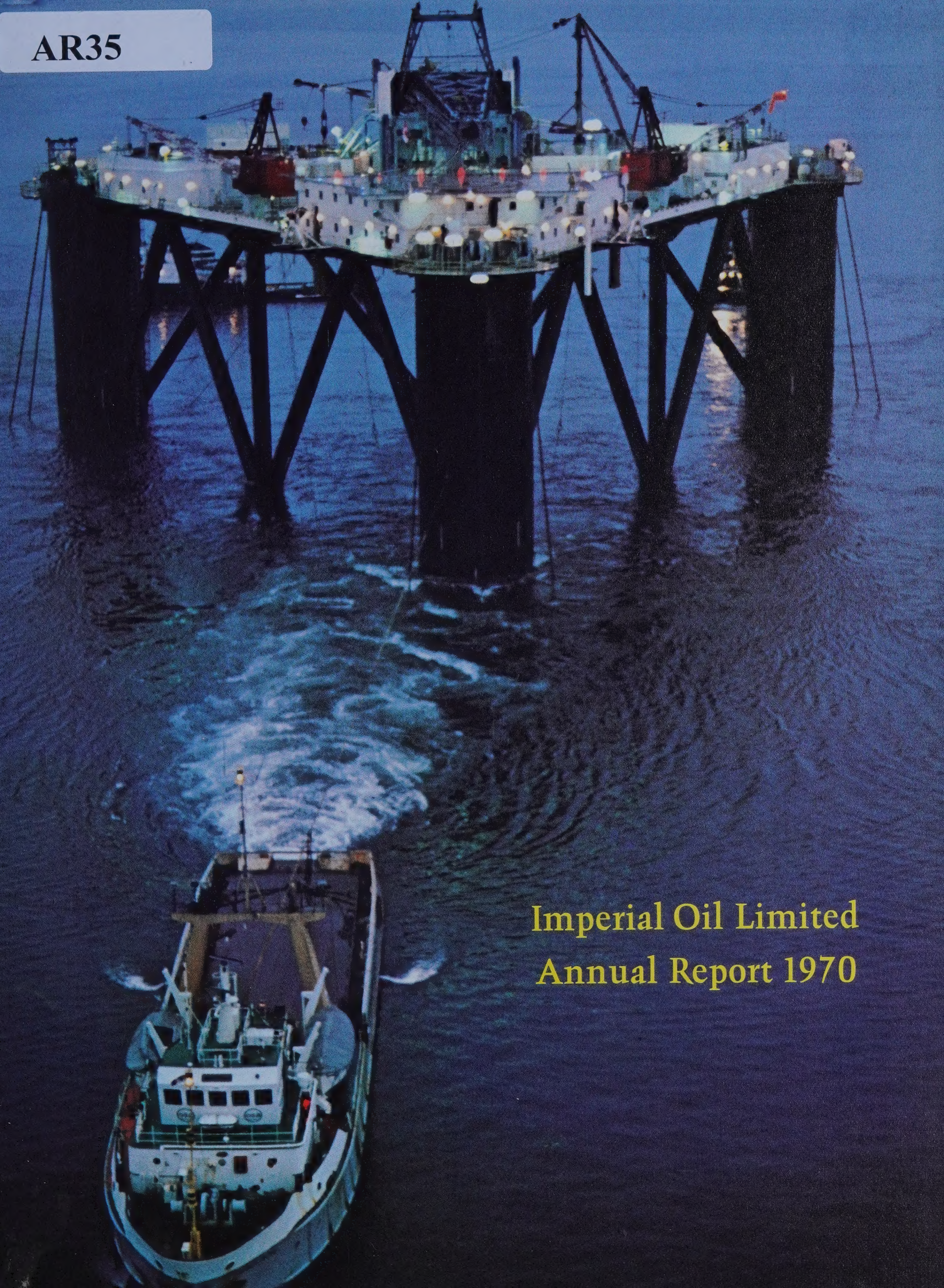


Imperial Oil Limited
Annual Report 1970

Imperial Oil Limited

DIRECTORS

J. A. Armstrong
J. A. Cogan
L. D. Fraser
J. W. Hamilton
J. G. Livingstone
J. F. Mathis
T. F. Moore*
R. S. Ritchie
V. Taylor
W. O. Twaits

**Retired January 31, 1970*

OFFICERS

Chairman of the Board and Chief Executive Officer
W. O. Twaits

President
J. A. Armstrong

Senior Vice-Presidents
J. A. Cogan
L. D. Fraser
T. F. Moore*
V. Taylor

Vice-Presidents
J. W. Hamilton
J. G. Livingstone
J. F. Mathis
R. S. Ritchie

General Secretary
G. M. Henderson

Comptroller
G. R. McLellan

Treasurer
D. W. McGibbon

General Counsel
J. F. Barrett, Q.C.

Imperial Oil Limited was incorporated under the Canada Joint Stock Companies Act, 1877 on September 8, 1880. Its head office is at 111 St. Clair Avenue West, Toronto 7, Ontario.

Principal subsidiaries of Imperial are: Atlas Supply Company of Canada Limited, Building Products of Canada Limited, Champlain Oil Products Limited, Home Oil Distributors Limited, Imperial Oil Enterprises Ltd.

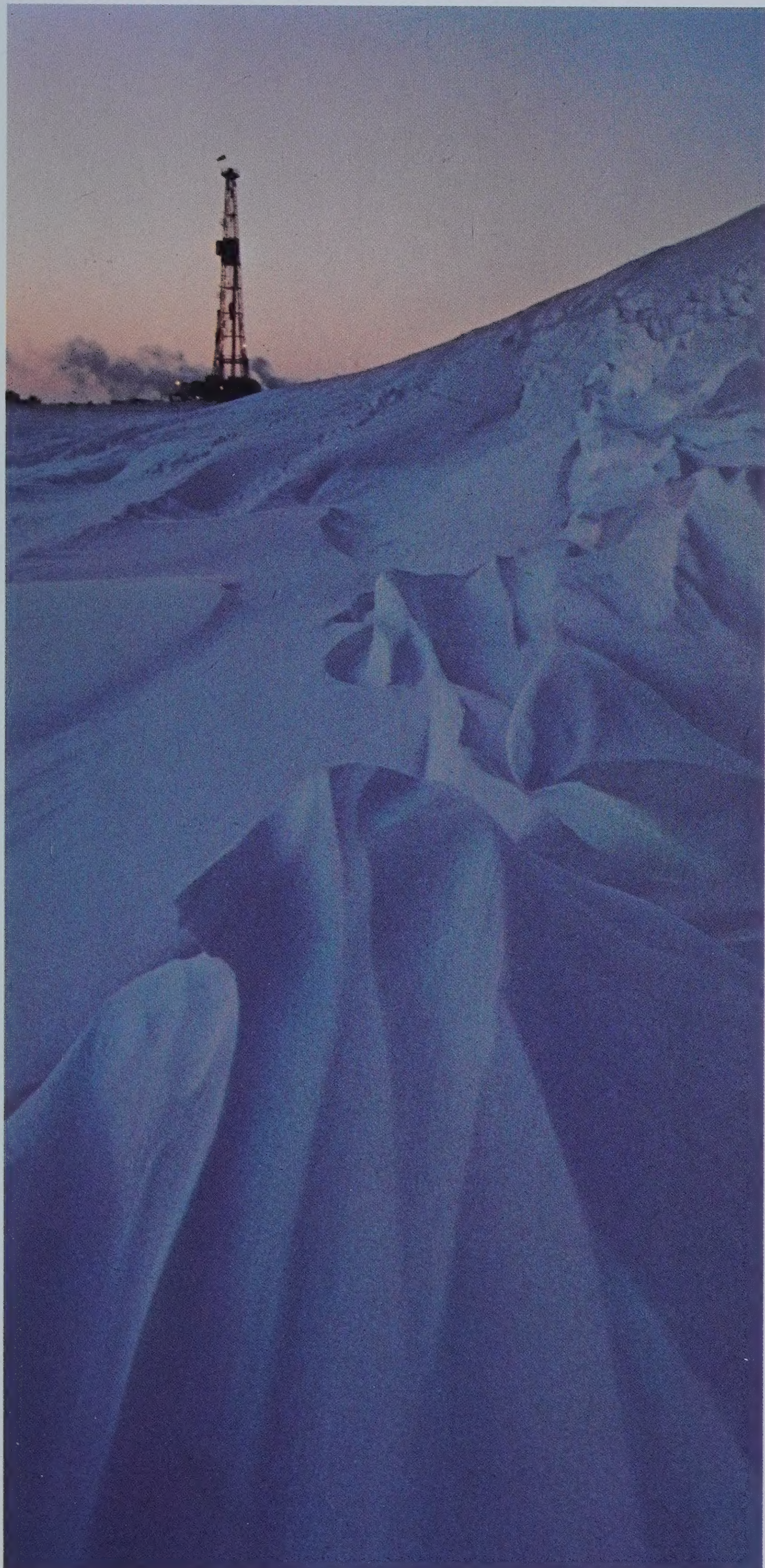
Principal investments and percentage interest in other companies are: Interprovincial Pipe Line Company, 33; Trans Mountain Oil Pipe Line Company, 8.6; Montreal Pipe Line Company Limited, 32; Rainbow Pipe Line Company, Ltd., 33.3; Tecumseh Gas Storage Limited, 50; Syncrude Canada Ltd., 30.

Imperial Oil Limited shares may be transferred at the following offices: head office of Imperial Oil Limited; principal offices of Montreal Trust Company at Halifax, N.S., Montreal, Que., Toronto, Ont., Winnipeg, Man., Regina, Sask., Calgary, Alta., Vancouver, B.C.; Bankers Trust Company, New York, N.Y.

The annual meeting of shareholders will be held at 11:00 a.m., Wednesday, April 28, 1971, in the Canadian Room, Royal York Hotel, Toronto, Ontario.

Upper left: Research into pipe line construction and operation in the tundra was carried out by Mackenzie Valley Pipe Line Research Ltd. Imperial is one of the companies sponsoring the research program. Right: Drilling rig at Natagnak in the Tuktoyaktuk Peninsula.

Annual Report 1970



CONTENTS

Highlights

FINANCIAL		1970	1969
dollars in millions except per share amounts			
EARNINGS	$	105	94
per share	¢	82	73
change from previous year	%	11.6	(6.1)
as a % of shareholders' investment	%	11.0	10.2
DIVIDENDS PAID TO SHAREHOLDERS	$	68	68
per share	¢	52½	52½
as a % of earnings	%	65	72
SHAREHOLDERS' INVESTMENT			
at year end	$	971	933
per share	$	7.56	7.26
CAPITAL AND EXPLORATION EXPENDITURES	$	122	134

OPERATING	1970	1969
thousands of barrels per day		
PETROLEUM PRODUCT SALES	400	381
CRUDE OIL PROCESSED AT REFINERIES	406	377
CRUDE OIL AND NATURAL GAS LIQUIDS		
gross production	199	179
net production	170	154
NATURAL GAS *millions of cubic feet per day*		
gross production	412	390
net production	349	331
GROSS RECOVERABLE RESERVES*		
crude oil and natural gas liquids (*millions of barrels*)	1,567	1,702
natural gas (*billions of cubic feet*)	3,328	3,340

*After allowing for production to date, these are estimated reserves which the company feels can reasonably be considered as proved.

Report to the Shareholders

In 1970 Imperial Oil's earnings recovered from the downturn of the previous year. At $105 million, they resumed a trend of growth which was interrupted in 1969 when earnings fell back to $94 million from $100 million in 1968.

The improvement during 1970 resulted from the overcoming of severe operating problems in major new refining and chemical units, growth of crude oil exports, increased product sales, and some recognition in product prices of the continued rise in costs.

In reviewing earnings performance it should be noted, however, that reflecting the massive capital expenditures of recent years, return on shareholders' investment is only now returning to levels achieved in the period 1965-68. Earnings must continue to rise to provide a satisfactory return on the heavy capital expenditures which will continue to be required to develop new oil and gas reserves, to provide environmental protection, and to meet increased product demand.

During 1970, the company's capital and exploration expenditures totalled $122 million. Details of these, and comparisons with expenditures of previous years, are set out in other sections of this report.

A highlight of the year's operations was the discovery of oil at Atkinson Point on the Arctic coast. While subsequent wells drilled were dry, disappointment was tempered by the fact that geological results obtained from the drilling confirm that the Arctic is a highly prospective region for crude oil and natural gas. At year end, Imperial had three seismic parties in the area, two rigs were drilling, and a third was being moved to location. The company's exploration program in the Arctic mainland is carried out almost entirely in the winter months—one of many practices designed to protect the environment.

Total volumes of petroleum processed by Imperial's refineries reached new highs. Severe problems which had been experienced with start-up of major new units at Sarnia were resolved during the year. This, along with the continued effort placed on efficiency improvement generally, resulted in lower supply costs for petroleum products.

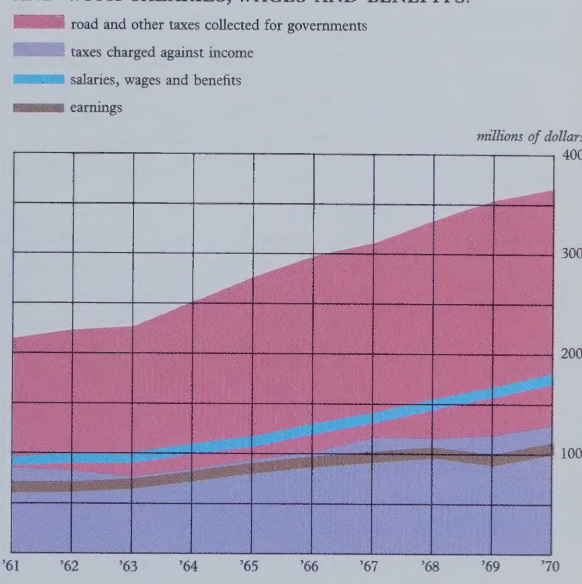
Petroleum product sales were 400,000 barrels a day. The increase in sales of motor gasoline was moderate, but sales of other fuels such

as aviation turbo, diesel, domestic heating oil and heavy fuel oil showed substantial gains over 1969. A factor in the motor gasoline picture was continued intense price competition in the Ontario market from private brand companies which imported "distress" supplies of gasoline from refineries in Europe which have substantial cost advantages over an Ontario refiner.

In October the company introduced Esso 2000, a low-lead gasoline designed for 1971 model cars and for some 20 per cent of older cars on the road today. The new gasoline is a first step towards supplying fuels needed to meet future automobile emissions standards. Also in the retail sales field the company opened self-serve gasoline bars and expanded its chain of Econo stations. These developments recognize the fact that a sizeable segment of the retail gasoline market is composed of customers who are willing to forego the full range of products and services traditionally available at major company stations in exchange for lower prices.

In the field of chemical products, increased sales and better plant performance resulted in improvement in the depressed earnings

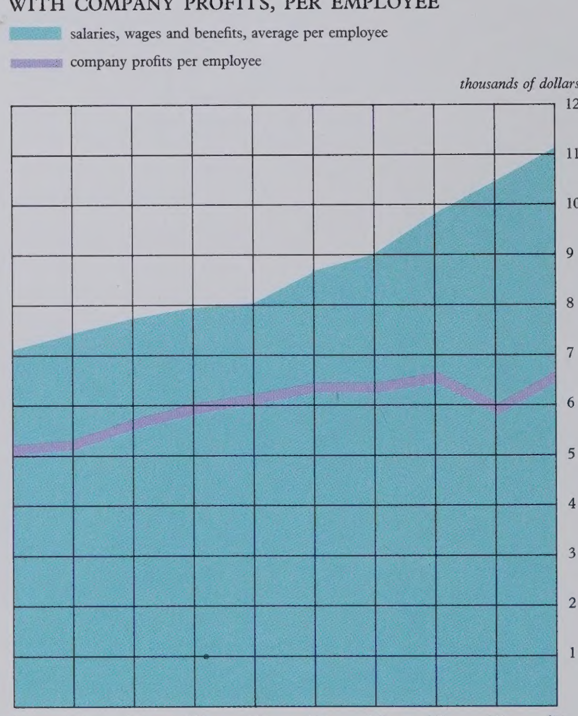
COMPANY EARNINGS COMPARED WITH TAXES AND WITH SALARIES, WAGES AND BENEFITS.



Seismic party moves to a new camp location in the Mackenzie Delta.

Above: The company's chain of Voyageur restaurants was expanded again. Forty are now in operation from Cape Breton to the B.C. interior. Opposite page: New units at Sarnia. A five-year expansion and modernization program at the refinery was completed in 1970.

SALARIES, WAGES AND BENEFITS COMPARED WITH COMPANY PROFITS, PER EMPLOYEE



position. Problems that had been experienced with new processing units at Sarnia, and which had caused some severe dislocations in supply of ethylene to customers, were largely overcome. Fertilizer sales increased substantially, reflecting the first full year of operation for the Redwater fertilizer plants, and the company's successful efforts to expand export markets which offset weaker prairie demand.

Sales and profits of Building Products of Canada Limited, an Imperial subsidiary, were adversely affected in 1970 by the general decline in new residential construction and renovations. This was particularly true of the company's flooring division, where sales revenues were inadequate to meet the rising cost of competitive marketing, research and product development activities. Because of these conditions the company found it could not continue to operate its Hamilton, Ont., flooring plant and, regretfully, closed this on December 31. The Ontario government and the union concerned were kept fully informed of developments in this matter, including severance pay arrangements. An employment counselling service was set up in conjunction with the federal department of manpower and immigration to assist employees in locating other work.

The year saw several developments of particular significance to the oil industry. One was the impetus given to exploration by the discovery of both oil and gas in the Arctic, and by the announcement late in the year that Canadian oil would be given greater access to U.S. markets. Further, higher prices for Canadian crude oil, which came into effect near year end, will help offset increased exploration and production costs.

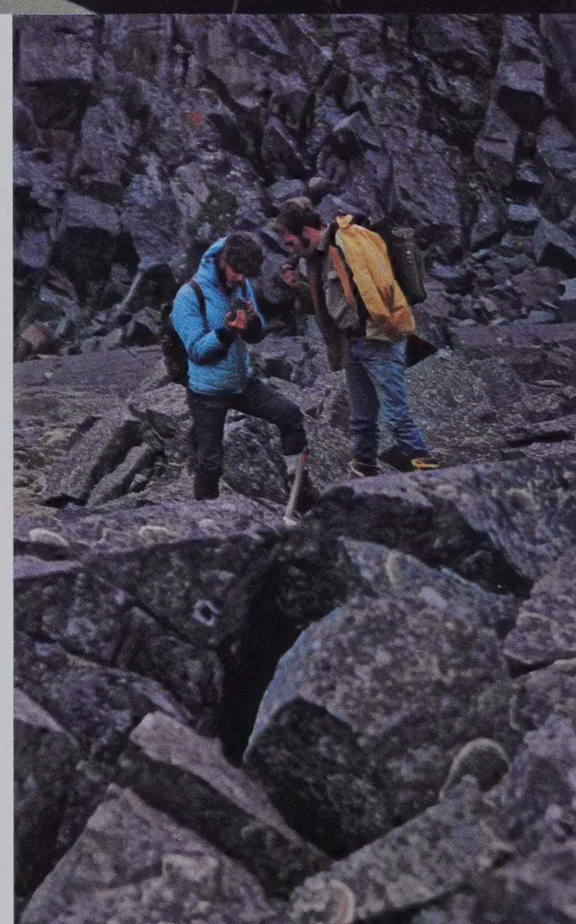
Several other developments, both at home and abroad, pointed up two facts that have become increasingly apparent in recent years. One is the degree to which present activities and future prospects of the oil and chemical industries are influenced by acts of governments. The second is the speed with which the socio-economic-political environment affecting industry is changing.

The situation facing the chemical industry is a case in point. By world standards the Canadian industry is small, yet it must compete,

with little tariff protection, against imports from giant external chemical complexes which can produce at lower unit costs, and tend to set Canadian prices. In 1970 excess plant capacity world-wide, and the increase in value of the Canadian dollar, made imports even cheaper. The nearest large market, the United States, is protected against Canadian products by relatively high tariff barriers. As a result, 1970 saw the continuation of a trend to a greater trade deficit in petrochemicals as imports increased and exports remained at about the levels of recent years. Unless there are changes in external conditions affecting the industry, its ability to compete in domestic markets will be increasingly impaired.

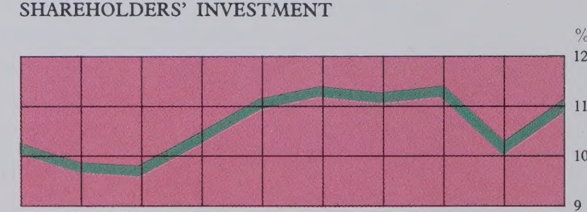
If Canadian chemical producers are to grow and prosper, they will require access to larger markets and to petrochemical feedstocks at world price levels to permit large, world-scale plants to be built. To meet these requirements action will be needed on the part of governments, aided in many areas by industry. Currently a joint industry-government committee is studying steps necessary to promote the healthy growth of this valuable and technically advanced business activity.

On the world scene, oil prices rose as a result of developments in the Middle East and Venezuela. In Libya, government action increased the price of crude oil produced in that country, and this was followed by similar actions in other countries, including Venezuela. At the same time, the Libyan government curtailed its country's crude oil production. This meant an even greater dependence on supplies from the Persian Gulf which, because of the shutdown of a major pipe line in Syria and the continued closure of the Suez Canal, had to be moved to western markets by the much longer route around Africa. The resultant shortage of tanker capacity caused ocean transportation rates to rise by as much as 200 per cent, with a consequent added increase in delivered prices of crude oils. Toward year end it was indicated that further pressures, again resulting from government action, would be put on world oil prices. The Organization of Petroleum Exporting Countries announced that its members were determined to secure, jointly, increased revenues from crude oil produced in their countries.



Above: Control room at Sarnia. TV monitor helps operators control flares to prevent smoke. Right: Minerals exploration was carried out in five provinces and the Yukon. Opposite page: Imperial's Calgary laboratories are conducting research into pipe line movement of crude oils at temperatures below which crudes flow naturally. The research has worldwide application.

EARNINGS AS A PERCENTAGE OF SHAREHOLDERS' INVESTMENT



As another example of such developments, by the latter half of 1970 the United States found itself facing a tightening energy supply situation. The problem in the United States is a result of many complicated factors, including a sharp increase in demand for low-sulphur fuels, but one thread runs throughout—the effect of government regulation. Indeed, industry representatives in the United States have been warning for some time that government actions would eventually precipitate just such a situation. Natural gas producers had pointed out that price levels for their products established by government regulations were such that exploration for new reserves could not be justified. Major refiners have emphasized that currently there isn't enough low-sulphur fuel oil available to meet demand arising from the rapid pace of new anti-pollution regulations.

In a recent article Fortune magazine commented that the era of low-cost fuel in the United States is over. This applies not only to the States, but world-wide. Quite aside from acts of governments which are putting upward pressures on prices, world demand for oil is rising dramatically. It is estimated that by 1980 consumption of oil in the free world will be 72 million barrels a day, compared with 40 million barrels a day in 1970. Tremendous exploration and capital expenditures will have to be made if these requirements are to be supplied and this will inevitably be reflected in increased product prices.

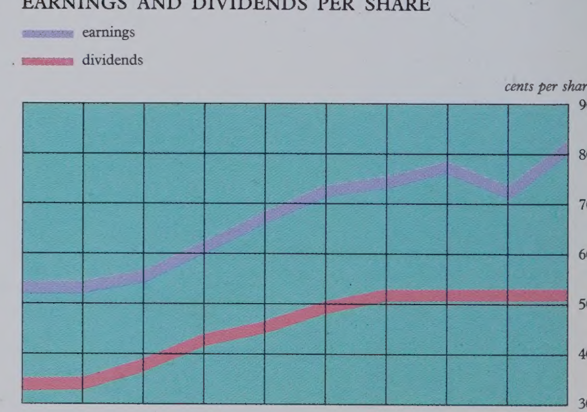
For more than a quarter century Canada has enjoyed the benefits of low-cost oil energy. In the period 1945-70, for example, the ex-tax wholesale price of the oil industry's principal product, gasoline, rose only 17 per cent, while in the same period the general wholesale price index rose 120 per cent, and wages and salaries 296 per cent. In latter years leaders in the Canadian oil business have stated repeatedly that their industry was reaching the point where technological innovation would no longer be able to offset rising costs. The industry has now reached the stage where its prices will not only have to be much more responsive to cost increases, but will have to achieve a level that will provide the incentive for the massive investments required to fill Canada's growing needs for energy.

In the current decade, the Canadian oil industry's capital requirements are forecast to be some $25 billion—$7 billion more than was required in the previous 20 years. This money will be needed to explore and develop frontier and other areas, to build the transportation facilities associated with development, to provide refining and marketing facilities to keep pace with growing demand, and to provide pollution control facilities and other necessary environmental protection activities. It is estimated that the industry will be able to generate internally not more than two-thirds of these capital needs. The balance, or at least $8.5 billion, will have to come from equity financing or from borrowing.

The oil industry's prospects for major discoveries, especially in the frontier areas, are good. It has demonstrated its ability to respond to technological challenges. However, changes or potential changes in regulations and tax structures by governments have introduced elements of uncertainty in the making of investment decisions. If the industry is to carry out the long-term planning necessary, and to make the investment decisions involved, it is vital that these uncertainties be resolved in a way that will promote, rather than hamper, its growth.

Above: Wildlife scientists Drs. W. W. Gunn (left) and J. A. Livingstone (right) discuss results of a study of Arctic bird nesting locations with associate F. A. Lewis. Survey was sponsored by Imperial and two other oil companies. Opposite page: Research was carried out in the Arctic on a method of keeping the permafrost frozen during drilling and producing operations. Brine was pumped through plastic pipes shown in top picture, by large refrigeration units shown below.

EARNINGS AND DIVIDENDS PER SHARE



Throughout the year Imperial continued its efforts to protect and conserve the environment. In addition to internal activities (see the financial and operations review section of this report), the company took a leading role in the formation of the Petroleum Association for the Conservation of the Canadian Environment. The objective of PACE is to assist member companies to discharge their environmental protection responsibilities more effectively and to help coordinate activities when joint effort is required.

As stated in previous annual reports, Imperial was concerned with and active in protecting the environment long before there was any widespread public concern and little if any legislation in this regard. From its experience the company is firmly of the opinion that a balance between material needs and environmental standards can be reached that will provide a quality of life satisfactory to the majority of Canadians. The company also believes that to achieve this balance realistic legislation and regulations are required. Regulations must not only be based on scientific data, they must recognize the cost to the economy—which will eventually be borne by the citizen as taxpayer and consumer—of resulting measures. Reflecting population growth, industrial expansion and increasing urbanization, it is estimated that the Canadian oil industry will have to spend more than $1 billion during the current decade on in-plant pollution control facilities and on the complex refining units needed to provide no-lead gasolines and low-sulphur furnace fuels. This expenditure will have to be reflected in product prices. Finally, all levels of government, and all government departments concerned, must recognize the necessity for a coordinated approach to the problem.

In these times of change, Imperial is fortunate that its employees bring to their tasks not only skills, talents and a sense of dedication, but a breadth of outlook acquired from various backgrounds, experiences and studies. They are responsible for the company's continued progress; to them the directors express their sincere appreciation and thanks.

W. O. Twaits, *Chairman and Chief Executive officer*

Financial Review

Following is a summary of the company's financial activities for 1970.

◎ Earnings after taxes were $105 million, or 82 cents per share, compared with $94 million or 73 cents per share in 1969. These represented an 11 per cent return on shareholders' investment, compared with 10.2 per cent in 1969 and 11.3 per cent in 1968.

◎ Dividends totalled 52½ cents per share, unchanged from 1969. Total dividends paid amounted to $68 million, or 65 per cent of earnings.

◎ Capital expenditures were $94 million; exploration expenditures $28 million.

◎ Revenues from all sources totalled $1.7 billion, an increase of 11.4 per cent over 1969.

◎ Income taxes were $58 million, an increase of $8 million over 1969. Total taxes charged against income were $129 million, compared with $120 million in the previous year. Road and other taxes collected on behalf of governments were $239 million. Total taxes generated by the company amounted to $368 million, more than three times what the company earned during the year and five times the amount it returned to its shareholders in the form of dividends. In addition, the company paid $32 million to governments for oil and gas royalties and to acquire and retain exploration rights.

◎ Total assets at year end were $1.6 billion, compared with $1.5 billion at the end of 1969. Working capital amounted to $312 million at year end; the ratio of current assets to current liabilities was 2.2 to 1.

◎ Increased working funds required by steadily expanding operations have been provided in part from short term borrowing which amounted to $47 million at December 31, 1970.

◎ The number of Imperial shareholders increased 5.5 per cent, from 50,188 to 52,934, during the year.

New gas processing plant at Quirk Creek, Alta. Its capacity is 90 million cubic feet of gas per day.

Operations Review

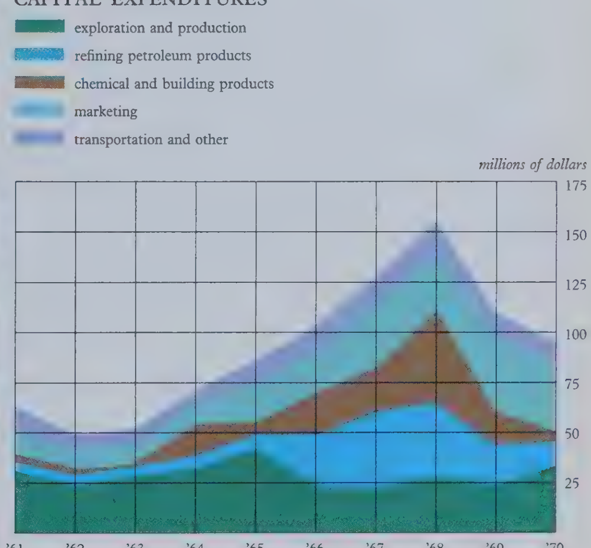
EXPLORATION AND PRODUCTION

Again in 1970 the bulk of Imperial's oil and natural gas exploration work was carried out in the Arctic and the Atlantic offshore. Over 60 per cent of the company's exploration expenditures were made in these frontier areas.

In January of 1970 the company discovered oil at Atkinson Point on the north coast of the Tuktoyaktuk Peninsula, 90 miles east of the mouth of the Mackenzie River. Medium gravity, low-sulphur crude oil flowed to the surface from a depth of 5,700 feet. While other wildcat wells drilled were unsuccessful, geological information obtained confirms that the area, in which Imperial holds exploration permits on some 10 million acres, is highly prospective and the company is proceeding with a major seismic and drilling program there.

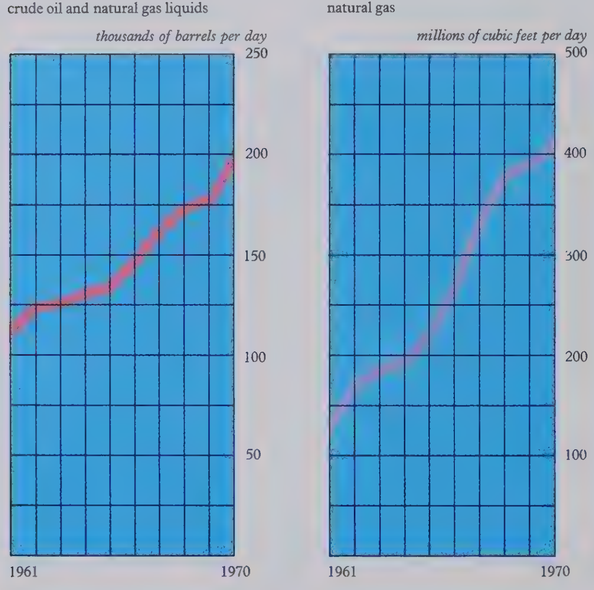
Three and one half million acres of the company's holdings in the Arctic are located in the shallow waters offshore the Mackenzie River Delta and in the Beaufort Sea. Initial exploration of these properties was carried out in the summer of 1970 by a 1,300-mile seismic survey. The seismic energy was generated by a non-dynamite source which is harmless to sea life and sea floor.

CAPITAL EXPENDITURES



Above: Imperial continued to expand its electronic data processing system, already one of the largest in Canada. This new facility is one of a number of units that gather and transmit data on manufacturing and marketing operations from locations across the country. Opposite page: 'Imperial Skeena', a 4,800-ton tanker, went into service on the west coast.

GROSS PRODUCTION CRUDE OIL AND NATURAL GAS



Early in 1970 the team of Imperial and Amoco Canada Petroleum Ltd. discovered the Boundary South oil field. This field is located in northwestern Alberta near the Boundary Lake field in British Columbia which was discovered in 1955. Twelve wells were drilled during 1970 to develop the new field.

Seismic surveys were continued on the Grand Banks off Newfoundland where Imperial has a one-half interest in 40 million acres of oil and gas exploration rights. Drilling will be resumed in 1971, utilizing a $15 million semi-submersible drilling platform built in Halifax. In the latter part of 1970 Imperial acquired, from the federal government, some 21 million acres of exploration permits off the coast of Labrador.

Gross production of crude oil and natural gas liquids totalled 199,000 barrels per day in 1970, an increase of 11 per cent over the previous year. Gross production of natural gas increased six per cent to 412 million cubic feet per day.

In 1970 some $28 million was spent on development drilling, secondary recovery projects, gas plants and other production facilities. Over half of this amount was to provide surface facilities for increased production capacity. As part of this program the company started construction to expand gas conservation plants in the Redwater and Judy Creek fields in Alberta.

Construction of a gas plant at Quirk Creek was nearing completion at year end. This plant, with a capacity of 90 million cubic feet of gas per day, is being built to handle production from the Quirk Creek field in southwestern Alberta which was discovered in 1967. Imperial's interest in the field and plant is approximately 50 per cent.

At Cold Lake, 145 miles northeast of Edmonton, Imperial holds large reserves of viscous petroleum. For several years the company has been doing both field and laboratory research on an economic method of producing this crude which cannot be recovered by conventional methods. Syncrude Canada Ltd., in which Imperial has a 30 per cent interest, is continuing laboratory and engineering work on development of its holdings in the Athabasca Tar Sands.

Imperial's widespread exploration for new mineral deposits was continued during 1970. Field prospecting, geochemical surveys and some drilling were carried on in Nova Scotia where encouraging showings of copper-bearing rock were found. By itself, and in joint ventures with others, Imperial pressed the search for base metals in New Brunswick, Quebec and Ontario (especially in the areas of Timmins and James Bay), British Columbia and the Yukon.

Uncertainties regarding federal government policies on uranium have led to a reduced emphasis in the company's search for this mineral.

TRANSPORTATION

As a result of dislocations in crude oil supply caused by developments in the Middle East, and a consequent very large increase in demand for ships, world tanker rates rose substantially in 1970. While Imperial's policy of chartering much of the tonnage it needs on a long-term basis helped offset the effects of the increased rates, the company's expenses for ocean transportation increased about $6 million in 1970. Costs for most other forms of transportation also rose substantially as a result of higher wages and increased rates for domestic marine, rail and truck services which the company purchased.

The new 4,800 deadweight ton coastal tanker 'Imperial Skeena' went into service on the west coast. A new barge, the 'Imperial Dartmouth' was launched at Collingwood, Ont., in November; it will deliver fuel oil in the Dartmouth, N.S., area.

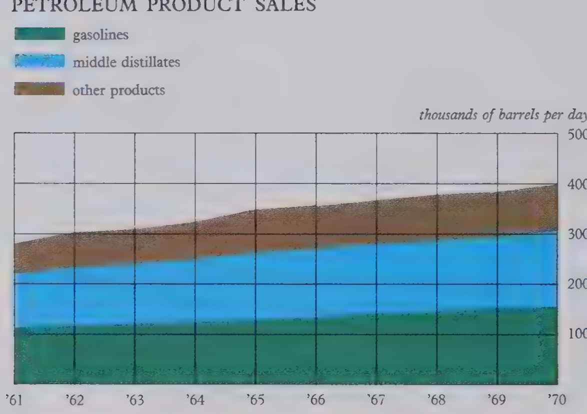
On February 4 the tanker 'Arrow,' on a single-voyage charter to Imperial, ran aground on Cerberus Rock in Chedabucto Bay, N.S. Immediately on receiving word of the accident Imperial moved men and equipment to the scene in an effort to protect the environment, even though the company was not in any way responsible for the operation of the ship and therefore not liable in this regard. Initially Imperial was the only organization on the scene. Later the company cooperated fully with the federal department of transport when it took charge of the operation.

PETROLEUM PRODUCTS

In 1970 Imperial's refineries processed a greater volume of petroleum than ever before. With the resolution of severe start-up problems which had been experienced earlier, there were no major operating problems. Total

Above: Self-serve stations were opened in Montreal and Toronto. Opposite page, top: A member of the Sarnia PVC Applications Laboratory checks on improved formulation for PVC pipe fittings, using a commercial injection moulding machine. Opposite page, bottom: New wax formulations developed for paperboard waterproofing are tested at the company's research laboratories at Sarnia.

PETROLEUM PRODUCT SALES



throughput averaged 406,000 barrels per day, some eight per cent above 1969. About 62 per cent of the crude processed was Canadian; the balance, for Imperial refineries east of the Ottawa Valley, was from foreign sources, mainly Venezuela.

During the year the last group of units to be built in the expansion and modernization program at Sarnia was successfully put on stream. Completion of this five-year construction program has improved refinery efficiency and increased the flexibility required to meet multiple product demands. Also at Sarnia contracts were awarded for the expansion of lubricating oil facilities. This project will increase lubricating oil manufacturing capacity at Sarnia by 50 per cent. Construction is scheduled to begin in the spring of 1971 and to be completed by mid-1972.

In 1970 the company's sales of petroleum products reached 400,000 barrels a day. Sales volumes were up strongly, with particularly good gains made in sales of diesel and heating fuels.

By the end of 1970, some 540 Imperial outlets in major cities and on some major highways were selling the new low-lead gasoline, Esso 2000. By the end of 1971, Esso 2000 will be available from some 880 outlets. Sales of the new gasoline in 1970 were limited owing to the small number of 1971 cars on the road, a situation compounded by the long General Motors strike.

Imperial continued to develop the new dealer franchise system, announced in 1969. To those who become franchisees Imperial offers intensive training and specialized business counselling. The franchisee in turn guarantees to provide his customers with a high standard of service. By year end 388 Imperial dealers had graduated under the new franchise plan—a figure which is expected to rise to some 1,300 by December 1971.

As mentioned earlier in this report Imperial expanded its chain of Econo stations and opened self-serve gasoline bars of the type which has been popular in other countries. Two of the new self-serve outlets were in Montreal, the third in Toronto. Time will be needed to judge the acceptance of these outlets.

Also in the automotive field, Imperial opened 22 more fast-service car washes, bringing

the total to 27, and continued to expand its chain of Voyageur restaurants, with 40 now in operation from Port Hastings on Cape Breton to Cache Creek in the interior of British Columbia. Use of the Esso credit card was further expanded to include Seaway and Independent motor inns. A system of "revolving credit" was also introduced.

Continuing its strong sales effort, Atlas Supply Company of Canada Limited supplied 78 foreign countries with its line of tires, batteries and accessories (TBA). In total, Atlas' export sales in 1970 increased more than 50 per cent over 1969, in spite of the upward movement in the value of the Canadian dollar.

In the growing field of home heating equipment Imperial introduced the new Model 40 Esso Burner, a compact clean-burning unit which produces more heat per gallon of fuel than previous models. Rentals of the oil-fired Esso water heater have been growing steadily since this economical unit was introduced in 1968.

In the same general field of service to the home owner, Imperial offered, at the builder and developer level, a "New Home" package. This includes loans to developers, second mortgage financing, Esso oil furnaces and rental water heaters. The program has proved successful in such major developments as the new city at Mississauga, west of Toronto, and the Kanata sub-division in Ottawa.

Expanding its service to customers who operate private and business aircraft, Imperial recently opened two additional AVITAT franchised units, at Calgary, Alta., and Thunder Bay, Ont. AVITAT offers pleasant terminal facilities for passengers and aircrew, as well as full facilities for servicing aircraft. The first AVITAT was opened at Montreal in 1969 and further installations are in the planning stages.

ESSO CHEMICAL CANADA

Reflecting improved operations of ethylene manufacturing facilities at Sarnia, and the fact that 1970 was the first full year of operation for the Redwater fertilizer plants, sales by Esso Chemical Canada increased 15 per cent from $80 million in 1969 to $92 million in 1970.

In spite of the depressed prairie farm economy, increased grain exports resulted in a slight recovery in the prairie fertilizer market, and

the company was successful in expanding export markets. Recent government statements indicate there could be a further improvement in grain exports during 1971, with a corresponding gain in fertilizer demand.

Domestic and export markets for polyvinyl chloride resins were weak, chiefly as a result of the general economic slowdown which depressed demand for these commodities. However, because of process research work conducted in the company's laboratories in Sarnia, which has made additional plant capacity available when this is required, Esso Chemical Canada is in a good competitive position to capitalize on future market expansion.

Imperial's subsidiaries, Poli-Twine Corporation Ltd. and Polybottle Limited, achieved significant sales increases in 1970. Poli-Twine's markets for all cordage products grew considerably. A major contribution to Polybottle's sales performance came from an expanded line of PVC bottles developed in earlier years.

ENVIRONMENTAL PROTECTION

In view of the Canadian Arctic's great potential, Imperial is engaged in a major effort, both by itself and in conjunction with other companies, to determine how exploration, development and transportation operations can best be carried out in this remote area. Particular emphasis is being placed on research into methods that will provide the maximum protection of the fragile northern ecology.

Allied with the results of research, Imperial's long experience in the north governs the company's operations in the Arctic. Guidelines for protecting the Arctic, based on this experience, were emphasized in an "Arctic Workshop" which the company held last October 6 in Edmonton for the instruction of seismic and drilling personnel working in the north.

Imperial's drilling rigs in the Arctic are supported on wooden piles or on thick gravel pads. Sometimes both methods are used. Research into another method of protecting permafrost under rigs was carried out by Imperial last summer. Brine, chilled by industrial refrigeration units, was circulated through some 60,000 feet of plastic pipe stretched in loops on the tundra, under cover of sand. Initial findings are that the refrigeration system works to keep the permafrost frozen; further evaluation of results is being carried out.

During 1970 Imperial led in the formation of the Arctic Petroleum Operators Association. Representing nearly all the companies operating in the Arctic regions, the purpose of APOA is to sponsor research projects aimed at solving major environmental and operational problems facing the oil industry in the Mackenzie Delta and the Beaufort Sea. In 1970 this organization spent $1.3 million on ice studies, bottom sampling surveys in the Beaufort Sea, and in contributions to various

Top of page: Member of Imperial seismic party. At year end the company had three parties operating in the Arctic. Above: A propane "gas popper" was used by the company in summer seismic operations in the Beaufort Sea. The device is harmless to marine life and sea floor. Opposite page: Measurement of ice stresses was one of several research projects carried out by Arctic Petroleum Operators Association. Imperial led in formation of the new association.

environmental-ecological research projects carried out in universities.

Another joint study in which Imperial participated was carried out by Mackenzie Valley Pipe Line Research Limited into pipe line transportation in the north. This study centres around a fully-instrumented test section of 48-inch diameter pipe line set up near Inuvik, N.W.T. Cost of this program will be more than $5 million.

In 1970 Imperial and two other major companies sponsored a study of bird life in the Mackenzie Delta. Basic object of the survey was to locate the nesting areas of migratory wildfowl so that these could be protected as required.

In all other phases of its operations, Imperial continued, as it has for many years, to emphasize environmental protection. In 1970 the company's expenditures on facilities that contribute to such protection were more than $8 million.

In recognition of the fact that population growth, increased urbanization and expansion of industry will call for increasingly higher environmental standards, the company's environmental coordinators and associated personnel undertook a major study during 1970 to evaluate what will be the company's long-term requirements for in-plant pollution control facilities. It is estimated that over the next 10 years Imperial's costs for such facilities will total at least $100 million. Other studies were conducted on expenditures that may be required to provide for the manufacture and marketing of lead-free gasolines and low-sulphur fuels; provision of these additional facilities could require the expenditure of $209 million.

In summary, so far as environmental protection is concerned Imperial sees its job as one of continuing to meet Canada's growing needs for energy and chemicals while at the same time conducting its operations in such a way that it helps achieve the environmental standards society desires.

Imperial Oil Limited and Subsidiary Companies

CONSOLIDATED STATEMENT OF EARNINGS FOR THE YEARS 1970 AND 1969

	1970	1969
REVENUES	*millions of dollars*	
Sales and other operating revenues	$ 1,680	1,511
Investment and other income	$ 31	25
	$ 1,711	1,536
EXPENSES		
Crude oil, products and merchandise purchases	$ 987	868
Operating, exploration and administrative expenses	$ 411	388
Depreciation and amortization (Note 5)	$ 67	56
Income taxes (Note 4)	$ 58	50
Taxes, other than income taxes	$ 71	70
Interest and discount on long term debt	$ 12	10
	$ 1,606	1,442
EARNINGS FOR THE YEAR	$ 105	94
per share	¢ 82	73

CONSOLIDATED STATEMENT OF SOURCE AND USE OF FUNDS FOR THE YEARS 1970 AND 1969

	1970	1969
SOURCE OF FUNDS	*millions of dollars*	
Funds from operations (earnings plus depreciation, amortization and deferred income taxes)	$ 178	172
Debentures issued	$ —	50
Capital stock issued	$ 1	1
Sales of property, plant and equipment	$ 11	5
	$ 190	228
USE OF FUNDS		
Capital expenditures for property, plant and equipment	$ 94	109
Dividends paid	$ 68	68
Increase in long term receivables, investments and other assets	$ 12	3
Reduction of long term debt	$ 5	—
	$ 179	180
INCREASE IN WORKING CAPITAL	$ 11	48

The Notes to the Financial Statements on pages 20 and 21 are a part of these statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 1970 AND 1969	1970	1969
CURRENT ASSETS	*millions of dollars*	
Cash, including time deposits	$ 44	36
Marketable securities, at the lower of cost and market	$ 18	15
Accounts receivable (Note 7)	$ 325	273
Prepaid expenses	$ 7	8
Inventories, at the lower of cost and net realizable value:		
crude oil, products and merchandise (Note 6)	$ 165	171
materials and supplies	$ 18	14
	$ 577	517
deduct:		
CURRENT LIABILITIES		
Bank loans	$ 2	13
Short term notes	$ 45	24
Accounts payable and accrued liabilities (Note 7)	$ 188	164
Income and other taxes payable	$ 30	15
	$ 265	216
WORKING CAPITAL	$ 312	301
add:		
PROPERTY, PLANT AND EQUIPMENT AND OTHER ASSETS		
Property, plant and equipment, at cost less accumulated depreciation and amortization (Note 5)	$ 875	859
Long term accounts receivable, investments and other assets (Note 8)	$ 103	91
CAPITAL EMPLOYED	$ 1,290	1,251
deduct:		
LONG TERM LIABILITIES AND DEFERRED CREDITS		
Long term debt (Note 9)	$ 173	178
Employee annuity and contingent obligations	$ 13	13
Deferred income taxes (Note 4)	$ 133	127
	$ 319	318
SHAREHOLDERS' INVESTMENT	$ 971	933
This investment is evidenced by		
Capital stock (Note 10)		
Authorized—160,000,000 no par value shares		
Issued 1970—128,594,067 shares: 1969—128,527,727 shares	$ 260	259
Earnings retained and used in the business:		
at beginning of year	$ 674	648
earnings for the year	$ 105	94
dividends paid	$ (68)	(68)
at end of year	$ 711	674
	$ 971	933

The Notes to the Financial Statements on pages 20 and 21 are a part of this statement.

Approved by the Board.

Notes to the Financial Statements

1. GENERAL
The consolidated financial statements include the accounts of Imperial Oil Limited and all its subsidiaries.

2. CONTINGENCIES AND COMMITMENTS
The company is a party to agreements under which it has undertaken to guarantee or otherwise protect certain principal and interest obligations of various crude oil pipe line companies. The long term indebtedness of these companies for which the company is contingently obligated amounted to $19 million at December 31, 1970. The pipe line companies are meeting these obligations as they fall due and present indications are that they will continue to do so.

The company has guaranteed or agreed to guarantee obligations of others, chiefly principal of and interest on borrowings, in the aggregate principal amount of $9 million. Tanker charter hire and other rentals and commitments payable by the companies under long term agreements approximate $17 million annually.

3. REMUNERATION OF DIRECTORS AND OFFICERS
The aggregate remuneration of directors and officers of the company in 1970 was $1,055,000. During the year there were ten directors, all of whom were officers of the company, and three other senior officers. All directors and officers are full time employees of the company.

4. INCOME TAXES
Income taxes charged in the earnings statement have been computed on the tax allocation basis except for the effect of producing well costs, for which tax allocation is not generally applied in the oil and gas industry. If the tax allocation basis had been followed for producing well costs the accumulated amount of deferred income taxes related to these costs would have been $37 million at December 31, 1970; the effect on earnings and deferred income taxes in this regard in 1970 and 1969 was not significant.

The companies carry on operations in all phases of the complex petroleum and petrochemical industry, and the related income tax interpretations, regulations and legislation are continually changing. As a result, there are usually some tax matters in question. The companies have made what they believe are adequate provisions for income taxes payable.

In 1968, the company was assessed for income tax on the gain realized in 1963 on the disposal of natural gas storage rights and facilities. As required by law the company has paid the tax of $4 million including interest and, on the advice of counsel, is contesting the assessment. This payment has been included in Funds on Deposit with Governments and Others (note 8). No income tax provision has been made for this item.

5. PROPERTY, PLANT AND EQUIPMENT AT DECEMBER 31

	1970	1969
Gross investment—at cost	*millions of dollars*	
Exploration and Production	$ 498	471
Refining Petroleum Products	$ 437	426
Chemical and Building Products	$ 184	185
Marketing	$ 329	306
Transportation	$ 147	143
Other	$ 30	33
Total	$1,625	1,564
Accumulated depreciation and amortization		
Exploration and Production	$ 212	201
Refining Petroleum Products	$ 269	260
Chemical and Building Products	$ 70	56
Marketing	$ 118	110
Transportation	$ 71	68
Other	$ 10	10
Total	$ 750	705
Net Investment	$ 875	859

Depreciation of plant and equipment is based on the estimated service lives of the assets, calculated on the straight line method. Amortization of producing well costs and of capitalized producing lease costs is determined on the unit of production method.

The charges against earnings in 1970 for amortization of producing well costs and capitalized producing lease costs amounted to $7 million and the accumulated provision at December 31, 1970 amounted to $127 million.

Exploration expenditures including costs of acquisition and retention of exploration acreage, geological and geophysical surveys, and unsuccessful drilling are charged against current earnings except to the extent they relate to the acquisition of acreage expected to be productive, based on the company's past experience.

6. INVENTORIES
Inventories of company produced crude oil and manufactured petroleum products on hand at December 31, 1970 were priced on the basis of average annual costs. In previous years such inventories were priced by using actual monthly costs. The effect on earnings of this change was not significant.

7. AMOUNTS OWING TO AND FROM AFFILIATED COMPANIES
At December 31, 1970 balances owing to and from affiliated companies, all of which arose in the

normal course of operations, were $28 million and $400,000 respectively.

8. LONG TERM ACCOUNTS RECEIVABLE, INVESTMENTS AND OTHER ASSETS AT DECEMBER 31

	1970	1969
	millions of dollars	
Long term accounts receivable	$ 68	56
Investment in other companies, at cost:		
With quoted market value 1970—$247 million 1969—$208 million	$ 16	16
Without quoted market value	$ 7	8
Funds on deposit with governments and others	$ 8	7
Deferred charges	$ 4	4
	$103	91

9. LONG TERM DEBT AT DECEMBER 31

	1970	1969
Imperial Oil Limited	*millions of dollars*	
3⅝% Sinking Fund Debentures, 1955 Issue, maturing February 1, 1975	$ 25	28
6¾% Sinking Fund Debentures, 1967 Issue, maturing January 2, 1987	$ 48	50
7¼% Serial Debentures, 1968 Issue, maturing January 2, 1976	$ 10	10
7⅜% Sinking Fund Debentures, 1968 Issue, maturing January 2, 1988	$ 40	40
8½% Sinking Fund Debentures, 1969 Issue, maturing August 15, 1989. This issue is subject to the holders' option to require prepayment of principal on August 15, 1974	$ 50	50
	$173	178

Sinking fund and maturity payments required in the next five years are $5 million in 1972, $7 million in each of 1973 and 1974 and $27 million in 1975.

10. CAPITAL STOCK

Under the company's Incentive Stock Option Plans employees may be granted options to purchase unissued common shares of the company at less than the market price on the date of granting the options. The 1959 and 1965 Plans established the option price at not less than 95 per cent of the market price on the date of granting the options and the 1970 Plan established the option price at not less than 90 per cent of the market price on the date of granting the options. As of December 31, 1970 there were outstanding options for shares exercisable at prices of $10.778, $12.855, $12.765, $15.793, $17.930 and $14.060. Options for 795,825 shares may be exercised currently, and for 480,785 shares after July 15, 1971, and for 158,810 shares after July 15, 1972. Included in the above are 400,649 shares under option to directors and officers. In 1970 the company issued 66,340 shares for $904,000 all under the terms of the Plans.

11. EMPLOYEE RETIREMENT PLANS

The companies have a number of retirement plans covering substantially all employees. The latest actuarial valuation indicated that all liabilities under the principal plan were fully funded by assets held by trustees.

AUDITORS' REPORT TO THE SHAREHOLDERS OF IMPERIAL OIL LIMITED

We have examined the Consolidated Statement of Financial Position of Imperial Oil Limited and its subsidiary companies as at December 31, 1970 and the Consolidated Statements of Earnings and Source and Use of Funds for the year then ended. Our examination was made in conformity with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1970 and the results of their operations and the source and use of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Price Waterhouse & Co.
Chartered Accountants
Toronto
March 4, 1971

Imperial Oil Limited and Subsidiary Companies

TEN YEAR FINANCIAL SUMMARY *(dollars in millions except per share and per employee amounts)*

Revenues

YEAR	Petroleum products	Crude oil and natural gas	Chemical and building products	Other products and merchandise	Other operating revenues	Total operating revenues	Investment and other incom
1970	$ 924	$ 534	$ 131	$ 63	$ 28	$ 1,680	$ 31
1969	877	437	123	59	15	1,511	25
1968	857	389	115	56	15	1,432	23
1967	817	321	107	46	8	1,299	20
1966	784	257	96	39	7	1,183	18
1965	773	247	85	34	6	1,145	17
1964	731	231	65	33	5	1,065	16
1963	702	226	37	30	6	1,001	14
1962	680	219	33	26	7	965	13
1961	654	182	28	25	6	895	13

Capital and Exploration Expenditures

YEAR	Exploration and production	Refining petroleum products	Chemical and building products	Marketing	Transportation and other	Total capital	Exploratio charged against income
1970	$ 34	$ 13	$ 5	$ 34	$ 8	$ 94	$ 28
1969	24	20	17	38	10	109	25
1968	29	38	46	29	14	156	32
1967	24	37	22	34	12	129	36
1966	25	25	22	19	12	103	37
1965	41	9	9	18	9	86	30
1964	33	6	17	11	5	72	28
1963	28	6	1	11	7	53	28
1962	25	5	1	12	6	49	27
1961	32	4	4	12	10	62	25

Financial Position at Year End

YEAR	Current assets	Current liabilities	Current ratio	Working capital	Property, plant and equipment–net	Capital employed	Total assets
1970	$ 577	$ 265	2.2	$ 312	$ 875	$ 1,290	$ 1,555
1969	517	216	2.4	301	859	1,251	1,467
1968	498	245	2.0	253	811	1,152	1,397
1967	449	175	2.6	274	713	1,073	1,248
1966	393	143	2.7	250	641	974	1,117
1965	402	130	3.1	272	593	937	1,067
1964	380	116	3.3	264	563	904	1,021
1963	389	125	3.1	264	545	877	1,002
1962	351	102	3.4	249	544	851	954
1961	336	107	3.2	229	548	832	939

**Weighted Average*

	Net Earnings		Dividends			Funds from Operations		
Total revenues	Total	Per share*	Total	As a percentage of earnings	Per share	Total	Per share*	YEAR
$1,711	$105	¢82	$68	65%	¢52½	$178	$1.38	1970
1,536	94	73	68	72	52½	172	1.33	1969
1,455	100	78	67	67	52½	170	1.33	1968
1,319	96	75	67	70	52½	160	1.26	1967
1,201	92	73	63	69	50	149	1.17	1966
1,162	86	68	59	68	46¼	145	1.15	1965
1,081	79	62	55	70	43¾	135	1.06	1964
1,015	71	56	49	69	38¾	118	.93	1963
978	68	54	44	65	35	116	.92	1962
908	68	54	44	65	35	115	.91	1961

Taxes						
Income taxes	Federal sales tax	Property and other taxes	Total charged against income	Road and other taxes	Total taxes generated	YEAR
$58	$52	$19	$129	$239	$368	1970
50	52	18	120	233	353	1969
49	49	17	115	221	336	1968
54	47	16	117	196	313	1967
44	43	16	103	197	300	1966
41	40	14	95	184	279	1965
37	36	14	87	164	251	1964
40	27	12	79	148	227	1963
43	28	12	83	142	225	1962
47	28	11	86	132	218	1961

			Shareholders at Year End		Employees			
						PAYROLL AND BENEFITS		
Long term debt	Share-holders' investment	Earnings as % of shareholders' investment*	Number	Shares issued (*thousands*)	Number December 31	Total	Per employee* (*thousands*)	YEAR
$173	$971	11.0%	52,934	128,594	15,543	$176	$11.2	1970
178	933	10.2	50,188	128,528	15,516	162	10.5	1969
128	906	11.3	37,780	128,437	15,164	150	9.9	1968
102	870	11.2	39,578	128,202	14,933	136	9.1	1967
56	830	11.3	41,088	127,167	14,289	125	8.8	1966
58	798	11.0	41,208	126,885	13,693	111	8.1	1965
64	769	10.4	40,924	126,674	13,623	104	8.0	1964
69	743	9.7	42,057	126,443	11,998	95	7.8	1963
73	712	9.8	43,195	126,428	12,257	95	7.5	1962
76	679	10.2	43,562	126,408	12,578	92	7.2	1961

Imperial Oil Limited and Subsidiary Companies

TEN YEAR OPERATING SUMMARY

Exploration and Production

				GROSS RECOVERABLE RESERVES*		GROSS PRODUCTION	
YEAR	Gross land holdings (millions of acres)	Net wells drilled exploratory	Net wells drilled development	Crude oil and natural gas liquids (millions of bbls.)	Natural gas (billions of cubic feet)	Crude oil and natural gas liquids (thousands of bbls. per day)	Natural gas (millions of cubic feet per day)
1970	64	23	27	1567	3328	199	412
1969	45	54	31	1702	3340	179	390
1968	46	90	54	1593	3117	173	381
1967	45	64	71	1517	2860	163	334
1966	50	81	87	1534	2964	146	268
1965	51	66	136	1522	2706	133	222
1964	32	84	116	1437	2620	131	193
1963	22	72	137	1264	2285	126	185
1962	17	65	171	1138	2447	124	170
1961	20	52	214	1025	2047	111	131

Crude Supply and Utilization—thousands of barrels per day

			CANADIAN CRUDE			IMPORTED CRUDE	
YEAR	Net production	Purchases from others	Domestic sales	Export sales	Used in Imperial refineries	Purchased for Imperial refineries	Total crude purchases
1970	170	589	304	203	252	154	743
1969	154	500	255	162	237	140	640
1968	150	443	225	145	223	136	579
1967	141	386	176	131	220	130	516
1966	127	339	153	94	219	127	466
1965	115	335	158	82	210	122	457
1964	114	305	149	77	193	121	426
1963	109	304	148	74	191	128	432
1962	108	297	143	75	187	118	415
1961	97	272	127	65	177	114	386

Petroleum Products—thousands of barrels per day

			SALES			
YEAR	Crude processed	Refinery capacity Dec. 31	Gasolines	Middle distillates	Other products	Total
1970	406	431	153	151	96	400
1969	377	422	151	143	87	381
1968	359	405	145	142	91	378
1967	350	397	141	138	87	366
1966	346	378	136	134	82	352
1965	332	370	128	134	83	345
1964	314	355	124	125	73	322
1963	319	345	120	121	68	309
1962	305	339	116	118	67	301
1961	291	338	112	108	61	281

**After allowing for production to date, these are estimated reserves which the company feels can reasonably be considered as proved.*

Front Cover: Sedco I, built in Halifax at a cost of more than $15 million, is taken out for sea trials. The semi-submersible platform will be used by Imperial in association with another company to drill for oil in the Grand Banks area.

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